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SEXUAL ABSTINENCE AND NERVOUSNESS *

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IN opening up for discussion in an association of general practitioners of medicine so old and time-worn a subject as this of the relationship between sexual abstinence and the functional neuroses, I am actuated by three considerations: (1) the study of the sexual life is still omitted from the curricula of our medical schools, and, consequently, physicians are as ignorant of the sexual functions as laymen are; (2) there is still no approach to unanimity of opinion, even among specialists, on any phase of the many questions suggested by and emanating from the subject; (3) the facts obtained by the studies and investigations of Freud and his disciples throw so much light on the vita sexualis and are so suggestive and significant that they are bound to be of the greatest interest to physicians, sociologists, moralists, pedagogues, and others having the welfare of humanity at heart. It is no exaggeration to say that without the guidance of Freud's teachings and the application of his method of psychanalysis it is impossible to get at the truth concerning the sexual life of modern civilized human beings. Almost all persons, even invalids, consider their sexual life to be so personal and private a matter that they do not speak of it even to their medical adviser; physicians share the conventional reticence of their patients and, in addition, lack the tact and ability to elicit the facts; and women,

* The above paper appeared in this Journal just three years ago, namely in June 1913. There was a great demand for it which after a short time we were unable to supply. Since then requests for that issue have been coming in more or less regularly, and we decided to reprint the paper in its entirety. It is well worth a careful reading.

even when questioned, almost always refuse to give up the truth about their sexual life. Besides, very few physicians, and still fewer laymen, associate their nervous and many other ailments with disturbances or abnormalities in the sexual functions.

"Nervousness" and Sexual Restraints.—And, as a matter of fact, Freud was the first one to maintain and champion the existence of a relationship between the tremendous increase of "nervousness" that characterizes modern civilization and the sexual practices resulting from our moral standard. Careful consideration of the clinical data proves that the influences conventionally assigned as the causes of nervousness, such as the excessive use of tobacco, coffee, or tea, alcoholism, overwork, the strain and stress of modern civilization, etc., are wholly inadequate to account for the great increase in the number of neurotics, or to throw light on the great variety of symptoms manifested by different patients. "Nervousness" occurs very frequently even among total abstainers from the chronic intoxicants, in those who "take life easy" and in those who are not overburdened with culture. Very early in his investigations Freud became convinced that the increase in the neuroses is the direct result of the checks and restrictions which invest the sexual life of the more highly civilized communities and that only in this sense can modern culture be held accountable for the vast and ever-increasing number of neurotics. All later experiences only go to confirm his dictum that no matter what other factors may be at work, *without some departure from the normal sexuality of the individual there can be no neurosis.* The essence of all these abnormalities is, as I shall show, the non-obtainment of sexual gratification,—the non-gratification of the libido.

Infantile Sexuality.—For the proper understanding of our theme, it is of the utmost importance to say first something about the sexuality of infancy and childhood. Contrary to general belief and the statements even of experts, the sexual instinct does not spring into life suddenly about the age of puberty. The sexual instinct accompanies man on his living journey from the moment of his birth to the moment of his dissolution, all the while undergoing a definite course of evolution and having definite characteristics for each period of the individual's life. In the earliest period of his childhood a human being is almost wholly *auto-erotic*, i. e., he obtains sexual gratification chiefly from his

own body; but inasmuch as the genital glands are undeveloped and have no sexual function, the genitals proper play only a small part, but by no means insignificant part, in the child's sexual activities. All truth-telling parents have observed their little darlings rubbing, pulling, or otherwise playing with their genitals —masturbating. Young infants, however, obtain their sexual pleasures chiefly from portions of the body known as *erogenous zones*. By an erogenous zone is meant a portion of skin or mucous membrane the suitable stimulation of which produces a pleasurable sensation of a sexual nature. *The lips* are a very important source of sexual gratification for infants, as may be judged from the frequency and pleasure with which children pass their time in sucking various parts of their body, e. g., the toe, the thumb, the tip of the tongue, or other object. Another important source of sexual gratification in infancy *is the anal zone*. The pleasure derived from the passage of hardened feces is such that the child holds back the evacuation of his bowels as long as possible and this lays the foundation for obstinate constipation and other intestinal disturbances. Rubbing of the anal zone with the fingers is not at all rare in children. *The urethral zone* also has tremendous sexual significance for infants; and this accounts for the frequency and obstinancy of bed-wetting by night or day and other bladder disturbances. Clinical experience shows that when wetting of the bed does not replace an epileptic attack, it means a pollution. *The skin* is the erogenous zone par excellence and is the seat of the pleasure derived from being tickled, stroked or spanked, from scratching, taking a warm bath, etc.

Besides the auto-erotic pleasures emanating from the stimulation of these and other erogenous zones (secondary sexual organs) young children also derive sexual gratification from activities relating to other persons than themselves. Chief among these are the pleasures obtained from exhibiting his genitals to his his comrades and elders (*Exhibitionism*), looking at the genitals of others (*Voyeurism*), watching other persons attending to their excretory functions, and inflicting suffering upon others (*Sadism*) or suffering themselves (*Masochism*). This by no means exhausts the sources of sexual pleasure in infancy but it is sufficient to show the justice of Freud's dictum that as regards their sexuality infants are *polymorph-perverse*, i. e., by nature predisposed to all sorts of sexual perversions and to inversion. In connection with this it is important to bear in mind that just

as the normal individual is to a certain degree anatomically hermaphroditic so is he normally functionally bisexual, and that in the course of his evolution the homosexual tendency is stunted, dwarfed, repressed, and the heterosexual developed. That the child's sexual curiosity and sexual activities are accompanied with fantasies involving his parents or other immediate relatives goes almost without saying.

The Sexual Latency Period.—The period of infantile sexuality is followed by the period of latent sexuality (6th to 13th or 14th year) which is characterized by the cessation of masturbation, the repression of the sense of sexual gratification emanating from the erogenous zones and from the partial impulses, the further development of the genital organs, the evolution of those psychic forces (disgust, shame, moral and aesthetic ideas) which serve to inhibit and restrict the sexual life, and the deviation of sexual energies from sexual aims to new and higher aims, viz.: in the interests of education and culture. The extent to which the individual's sexuality can be sublimated or refined into energies of other sorts varies with different individuals just as does the intensity of the sexual instinct; but in only very rare instances is it possible to transmute all of one's sexual energies into energies and activities of other sorts. In a very large number of children there is a breaking through, a curtailment or suspension of the latency period as a result of a spontaneous sexual prematurity, and there ensues a period of all sorts of perverse sexual activities. When this happens, the subsequent psychic control of the sexual impulse becomes a very difficult matter and there results either the fixation of a perverse tendency or the development of a neurosis.

Puberty and Adolescence.—With the advent of puberty very important anatomical, physiological, and psychological changes take place in the human economy, most of which are too well-known to be enumerated here. Less well known and little understood, but of very great importance, are the changes that take place at this time in the internal secretions of the thymus gland, the hypophysis cerebri, the pineal gland, the thyroid gland, the adrenal bodies, the testes, ovaries and, perhaps, other glandular structures. With these changes there go along very important and complex functional changes in the sexual sphere. The sexual impulse loses its auto-erotic character, becomes hetero-erotic

and acquires a new aim, the discharge of the sexual products; the partial sexual impulses coöperate in the production of the new and extremely pleasurable sexual aim and the erogenous zones are subordinated to the primacy of the genitals. Obviously all these changes are brought about in the interests of the impulses of self-preservation and the propagation of the species.

The sexual apparatus of the adult is aroused to activity by various stimuli emanating from three sources, viz. (1) from the outer world through the erogenous zones (eyes, ears, etc.); (2) from the presence within the body of various hormones and sexual substance, and (3) from the psychic sphere. Very little reflection will show that modern society is very rich in stimuli to the sexual impulses. We need mention only the costumes of women (revealing what they are intended to conceal), cosmetics and perfumes, erotic dances, romantic novels, suggestive jokes, sentimental pictures, pornographic "literature," the sexual drama and sensuous music. The housing conditions of the poor are particularly calculated to arouse the sexual passions of our boys and girls before and after puberty. The mental concentration demanded of children in schools and colleges, the strain and worry associated with passing examinations, the exhilaration accompanying various kinds of muscular activity and mechanical excitation of the body, the stirring up of the affective processes by theatrical displays, etc., all tend powerfully to excite the sexual impulses. In addition to all these forces, very few boys and girls escape seduction into evil practices by comrades and older associates.

As a result of all these and other stimuli there is brought about a state of sexual excitation which manifests itself in numerous physical signs as well as in a peculiar, unpleasant state of psychic tension which craves for urgent relief. This coveted pleasure and relief can normally be brought about only in one way: by the discharge of the accumulated sexual substance during normal coitus.

Normal Coitus.—That normal coitus should accomplish its object of freeing the sexual tension and temporarily quenching the sexual desires it is not sufficient for two people of opposite sexes to perform the sexual act. Normal coitus requires not only the discharge of sexual substance but the gratification of all the accessory sexual components before the attainment of the "end pleasure" (the discharge). Before there can be a com-

plete and adequate discharge of the accumulated libido, there must be a complete self-surrender to the task in hand, an absence of all restraining influences (fear, shame, disgust, etc.), and an augmentation of the sexual tension by the stimulation of certain of the erogenous zones and partial impulses (kissing, hugging, tickling, touching, etc.). In other words, there must be that overvaluation of the sexual partner and of every part of him or her that constitutes love. Unless these conditions are complied with, there ensues only a partial liberation of sexual tension, and in a short time a chronic sexual toxemia results.

Our Moral Standard.—The conventional, i. e., theoretical, morals of the most highly civilized communities do not permit adolescents and adults to indulge in normal coitus before marriage, and if they do not marry, they are assumed to remain chaste until death. Widows and widowers must also refrain from sexual intercourse until they remarry. In other words, sexual indulgence is restricted to those who have entered into monogamous marriage, and the form of indulgence is limited to the union of the genitals in normal coitus. Homosexual and perverse practices are considered very serious offenses against morality and punishable by imprisonment and ostracism. Indulgence in sexual gratification by the unmarried is not considered criminal but sinful and immoral. Owing to the probable consequences women particularly are enforced to chastity. And when one takes modern social and economic conditions into consideration and the consequent practical inability of young men and women entering into marriage until they have established financial independence from their parents, it follows that they are required to refrain from sexual indulgence until they are anywhere from 25 to 35 years of age.

Certain Peculiarities of the Sexual Instinct.—One of the best established results of modern psychanalytic research is the fact that the sexuality of different individuals varies (1) *quantitatively*, (2) *qualitatively*, (3) *as to capacity for sublimation, and* (4) *as to imperiousness.* Just as persons vary as to the quantity of food, sleep, drink or rest that their constitutions require, so do they vary as to the quantity of sexual indulgence requisite to gratify their libido. Some are content with coitus once a week, or once a fortnight; others require it daily or even several times daily. Even more important than this are the qual-

itative differences among individuals. As a result of *congenital predisposition and acquired tendencies resulting from infantile experiences*, the normal evolution of the sexual impulse from the infantile bisexuality to the adult hetero-sexuality is interfered with in various ways and there result all sorts and degrees of inversions and perversions. By *inversion* we mean that form of sexual aberration which consists in the sexual attraction of one individual for another individual of his own sex. Individuals possessing this trait may be divided according to Freud into three classes: those who are *absolutely inverted, amphigenously inverted*, and *occasionally inverted*. The *absolutely inverted* are characterized by a total indifference or repugnance for persons of the opposite sex and therefore are incapable of normal coitus or derive no pleasure in its performance. The *amphigenously inverted*, or psycho-sexual hermaphrodites, enjoy sexual relations with either sex. The *occasionally inverted* are normal heterosexual persons who, because of external conditions, may find sexual gratification in a person of the same sex. As to the sexual aim of inverts it must be borne in mind that they are by no means all guilty of such acts as *pederasty* (intercourse per anum), *fellatorism* (intercourse per os), etc. In fact *masturbation* is probably just as frequently the sole sexual aim as all the others combined, and a purely *ideal love* (i. e., without any sexual act) is extremely frequent in inverts. Then too one must not forget that there are many perfectly normal (i. e., sane) individuals who choose for the sexual object children, and others, notably in the country, who are attracted by animals (*zoophilia*).

By a pervert we mean a heterosexual individual whose sexual aim is not normal coitus but some other form of sexual activity. Freud divides the perversions into (a) *anatomical transgressions of the portions of the body destined for the sexual union* and (b) *lingering at the preliminary excitants to the sexual aim* to such an extent as to take the place of the normal aim. A study of a large number of perverts has shown that almost any portion of the body may be utilized as genitals, e. g., the mouth zone, the anal zone, the breasts, the axillae, etc., giving rise to the perversions known as fellatorism, pederasty, sapphism, etc. When the usual (i. e., normal) preliminaries to normal coitus are prolonged to such an extent as to form them into new sexual aims and to do away with the desire for the normal sexual act, we have such perversions as exhibitionism, voyeurism, mutual masturbation, sadism, masochism, etc.

Under perversions, too, we must include the large number of *fetichists*, i. e., persons who substitute for the normal sexual object (a person of the opposite sex) some object which is in some way related to it but which is totally unfit for the normal sexual aim (coitus). In addition to these we must mention those aberrations which may properly be described as *morbid perversions* i. e., cases in which the normal impulse is supplanted by cravings incompatible with the normal resistances of shame, disgust and fear. Among these we include urolagnia, coprophilia, etc. The proportion of the individual's sexual energies that lends itself to sublimation or conversion varies greatly; some may sublimate a very large part, others only very little, and in no case is it possible to sublimate all of it, i. e., to do away with the sexual craving altogether. The sexual instinct cannot be crushed: it may be abused, maltreated, etc., but, like, murder, it will out. The instinct is so imperative in its demands that it is normally only very poorly controlled (inhibited) by the higher psychic activities. This instinct is stronger, more insistent and more imperative than the voice of conscience or religion or the fear of disease. Nature cannot be thwarted in its designs. The continuous production of sexual substance, the constant production of the hormones, and the pressure on the sexual reservoirs, produce and maintain a state of sexual tension and a craving for relief which is heightened by the manifold stimulation of the erogenous zones to such an extent as to make the performance of the sexual act almost imperative. In this way nature assures the propagation of the species.

Sexual Abstinence Defined.—The failure to take the preceding facts into consideration has resulted in a failure hitherto to reach a satisfactory definition of the term "sexual abstinence." Every writer on the subject gave a different definition. Most writers heretofore have considered him abstinent who refrains from coitus with a person of the opposite sex. Obviously such a definition leaves out of consideration the large number of inverts and perverts and masturbators who derive sexual gratification in other ways than in normal coitus, and yet these are certainly not abstinent. And on the other hand a pervert or homosexualist may indulge in normal sexual intercourse without obtaining the least gratification from the act; on the contrary he or she may be repelled by a person of the opposite sex and be disgusted at the act.

In such a case there is absolutely no discharge of the libido, no liberation of sexual tension, no relief from psychic discomfort, but on the contrary a damming up of the libido, a further intoxication, an increase of psychic discomfort, and such a person is really abstinent though he indulges in coitus daily. Perverts and inverts are sexually abstinent if they refrain for a long time from the particular form of sexual indulgence which gives them sexual gratification. A person who refrains from sexual intercourse with a person of the opposite sex but derives sexual gratification in other ways (e. g., masturbation, fetichism, etc.), is only *apparently sexually abstinent;* whereas a person who refrains from that particular form of activity which gives him sexual gratification, although he have occasional or frequent discharges of sexual substance, is *really sexually abstinent.* We thus reach V. Muller's definition of sexual abstinence as '*abstinence (for a long time) from physical gratification of the type of sexuality characteristic of the person concerned*' (Sexual-Probleme, 1909, p. 309) or refraining from the specific act called for by the individual's libido. It goes without saying that in the discussion of this topic we assume the existence of a sexual appetite and the presence of normal genitals. A person born without a sexual instinct or with deformed organs cannot be included in the study of the normal. A word of warning must also be sounded against confounding "sexual abstinence" with "chastity" or "sexual purity"; the two conceptions have nothing to do with each other.

Causes of Abstinence.—Considering the imperious nature of the sexual instinct and the consequences resulting from the failure to gratify it, we must consider the causes that lead to sexual abstinence. For our purpose we may divide sexual abstinence into two classes: *voluntary abstinence* and *involuntary abstinence.* Involuntary abstinence, to take the latter first, results from causes beyond the individual's control and often without his knowledge; e. g., (1) indulgence in a form of sexual activity which is not calculated to gratify the libido peculiar to the individual concerned. Chronic masturbators, inverts, perverts, persons dominated by an incest complex, women who do not love their husbands, etc., who indulge in coitus without obtaining gratification, are involuntarily abstinent. In general it may be said that involuntary abstinence results from an arrest of development at some infantile stage of sexuality (fixation); or a regression

to some infantile stage. The reasons for voluntary abstinence are numerous, but only the chief of them can be enumerated here briefly: (1) the inability, owing to pecuniary considerations, of the man to hire the services of a puella publica; (2) the impracticability, owing to economic considerations, of the adult male and female to enter into marriage and assume the responsibilities of parenthood; (3) the fear of pregnancy; (4) religious, moral and ethical considerations; (5) the fear of venereal infection from coitus with a puella publica; (6) separation from the lawful sexual mate because of business and other considerations; (7) the fear of injury to bodily health in persons suffering from diseases of the heart, arteries, lungs, etc.; (8) marital disharmony and incompatibility; (9) vanity and social duties (in women); (10) the fear of injuring the fetus in the latter months of pregnancy; (11) mechanical interferences to the act, e. g., obesity, late months of pregnancy, etc.; (12) the desire to limit the number of offspring; (13) the fear of the law for infringing on restrictions against homosexuality and perversions; (14) fear of social ostracism; (15) fear of injury to health or to mind from masturbation; (16) turning away from persons of the opposite sex because of unhappy experiences with them, etc. Congenital absence of libido and deformity of sexual organs are obviously not considered here.

Abstinence in the Married. — Paradoxical as it may sound, a very large percentage of married people are abstinent. Marriage, we may add, is a civic institution having for its purposes mutual sexual gratification and the preservation of health. After the age of puberty young men and women are urged to remain absolutely abstinent and to husband their energies in anticipation of marriage. As a result of the high cost of living, starvation wages, the desire to live up to the ever-changing fashions, to enjoy the benefits of modern inventions and work-saving devices, to frequent the theatres, to discharge one's social duties, and, above all, the desire to shirk the difficulties and responsibilities of begetting and educating children, almost all married people resort sooner or later to some method of preventing conception. Various alleged preventives are soon found to be unreliable as protective measures. Then resort is had to coitus condomatus, coitus reservatus, etc., although these methods do not gratify the libido. If the husband refuses to adopt these methods of

intercourse, quarrels ensue, and sooner or later the married couple abandon sexual relations altogether or resort to masturbation. Psychic causes, e. g., frigidity, psychic impotence, etc., also frequently lead to abstinence. Organic diseases, e. g., chronic urethritis, chronic congestion of the prostate, etc., resulting in ejaculatio precox also cause abstinence. If as a result of sexual irregularities, tampering with nature, the husband or wife becomes sick, the irregular coitus ceases and it is not long before the husband or wife or both look for gratification elsewhere. So also if sexual relations cease because of the already too large family. Other important and frequent causes for abstinence in the married are too common dullness and apathy and indifference which characterize modern marriage; most married women become tawdry and careless housekeepers and their husbands mere wage-earners or, vulgarly put, mere "meal tickets." Of real sympathy between husband and wife our marriage system knows only exceptional instances. Quarreling and bickering are only too common. If there weren't so many obstacles to divorce they would be the rule. It is a sad truth that in modern society marriage means the death of love, and with it sexual gratification is even more impossible than it was before marriage. Without sexual love, spiritual love between man and wife is impossible. Thus marriage, modern marriage, is a chief cause of sexual abstinence, of serious psychic conflicts, and of functional and organic diseases. And from this point of view, even if from no other, modern marriage is a failure.

Abstinence in the Climacterium.—The general belief entertained even by physicians that the climacterium in women and the senium in men are characterized by the extinction of the libido is utterly untrue. As a matter of fact, the occurrence of these periods coincides in almost all individuals with a sudden and intense augmentation of somatic sexual excitement. Why this should be so is not known, but it seems to be dependent upon a disturbance in the chemistry of the hormones. In elderly men we may frequently find a diminished potency with a great increase in somatic sexual excitement, and as a result of this disproportion there is a failure on the part of the psyche to consume the sexual excitement and thus again there results sexual abstinence. In women the involution of the reproductive organs is usually accompanied with such an immense increase in the libido that they

are disgusted at it, and in consequence they refrain from sexual indulgence or are incapable of psychically consuming the augmented excitement. In this way it becomes a comparatively simple matter to account for many "nervous" disturbances occurring in elderly people.

Manifestations of Abstinence.—Many persons, medically trained and otherwise, actuated by religious and moral motives, assert that sexual abstinence is not injurious to health. But religion and morals have no place in a scientific discussion of a medical problem. In their discussions the advocates of abstinence point out cases in which abstinence—by which they mean refraining from sexual intercourse with a person of the opposite sex—was not followed by disease. But this argument proves nothing, no more than the fact that not everyone who has the Klebs-Loeffler bacilli in his throat develops diphtheria proves that this germ is not the true cause of diphtheria. Others emphatically assert that they never saw evil results follow abstinence. But this only shows that their observations were very limited, or that their powers of observation are limited, or that they mean something else by abstinence than we do, or that they willfully close their eyes to the truth. Similarly the argument that some persons have been abstinent without developing organic disease or neuroses does not prove that abstinence is not injurious to most persons. It all depends upon the individual's psychosexual constitution, the quantity and quality of one's libido, etc. Besides, many persons never tell the truth about their sexual transgressions and others are guilty of sexual activities without being aware that they are so. It may be of some interest to enumerate the great variety of opinions entertained on this subject by modern writers. (1) There are those who claim that abstinence is harmless (Cramer, Finkler, Gaertner, Gruber, Gruetzner, Hoche, Kraepelin, Lassar, Orbow, Schottelins, Seifert, Selenew, Tuczek, etc.); (2) that it is harmful in some cases (Gruber, Juergensen, Hensen, etc.); (3) that though it is harmless, normal intercourse is preferable (Strümpell); (4) that it leads to masturbation but is preferable to venereal disease (Hoffmann); (5) that it prevents venereal disease (Strümpell, Hoffmann); (6) that it is harmless up to the age of 30, but that after that it tends to produce psychic anomalies (Rumpf, Leyden); (7) that it leads to masturbation and hysteria in some cases (Heim); (8) that it is incompatible with health (Ellis); (9) that it leads to

unnatural practices (Nescheda); (10) that it improves the will-power (Weber); (11) that it is good up to the age of 25 (Tarnowsky, Tschick); (12) that it is harmless up to 25 (Orbow); (13) that it is beneficial at all ages and conserves the individual's energies (Popow); (14) that it is neither normal nor beneficial and as a rule leads to masturbation (Blumenau); (15) that it is harmful after 20 and may cause serious disturbances besides impairing one's capacity for work (Erb), etc.

This great variety of opinion shows only that the methods of observation hitherto employed were unsuited to the study of the problem. A careful reading of the writings of former sexologists, neurologists, etc., shows that the respective writers knew so little of the sexual instincts in comparison with what we know to-day that their conclusions are utterly worthless. Without a thorough knowledge of the Freudian technique and the psychanalytic study of "nervous" patients no one can ascertain the truth about the vita sexualis of modern cultured human beings. Such a study of neurotic patients of all sorts has convinced Freud and his school that "the overcoming through sublimation, i. e., deflection of the sexual energies from sexual aims to higher cultural aims, succeeds only in the minority and even in them only temporarily, and least easily in the period of fiery youth. Most of the others become neurotic or come to grief in other ways" (Freud, Sammlung, II, p. 186). Freud has come to the conclusion that the subduing of so powerful an instinct as the sexual requires so much of an individual's energies that beyond the age of 20 it is no longer unobjectionable and leads to neuroses besides other ills. Nature punishes every attempt to thwart the sex instinct. Health is impossible without love.

All clinical experience goes to show that the vast majority of civilized human beings are so constituted that if they live sexually abstinent for a considerable period of time, which period varies with different individuals according to their psychosexual constitution, predisposition to neuroses, physical constitution, environment, infantile and later experiences, education, morals, etc.,—they inevitably and necessarily suffer from a large variety of symptoms. Among these are an impaired capacity for work, depression; lassitude; a falling away from friends; a feeling of indifference about one's clothes, appearance, work, food, and social duties; a lack of joy in life; sleeplessness; weakness of will; loss of ambition; dreaminess and listlessness; distressing dreams;

obstinate contipation; attacks of palpitation; frequent headaches, etc. Students are conscious of an impairment of memory, an inability to concentrate their attention upon their studies; they fall behind in their work and fear that they are doomed to failure in life and to prove a disappointment to their relatives. And thus many do indeed waste the best years of their youth. The suppressed sexual energies strive to be let loose, to find a vent. Erotic thoughts and fantasies permeate almost all of the abstinents' activities and disturb their sleep at night and interfere with their work by day. The occurrence of pains in the testicles and in the cord, a feeling of weight and heaviness in the prostate, an occasional "wet dream," or a slight seminal flow from the urethra during defacation, etc., cause them a great deal of worry which at times leads to a state almost identical with melancholia. Not infrequently there occur all sorts of indefinite pains in the back, in the limbs, in the head, etc. Many suffer from sparks before their eyes, trembling of the hands, stammering, a slowness in recollecting customary and familiar phrases, an inability to speak connectedly, and so forth. The married and those who have once been married are especially unable to endure abstinence. Once the sexual appetite has been gratified, it craves for more and so insistently that it requires all one's energies to resist it.

The general opinion that girls and women can endure abstinence better than men is entirely unfounded in fact. On the contrary owing to numerous causes,—the occurrence of the menses and consequent congestion of the sexual organs, their sentimentality, their suggestibility, modern dress, the perusal of romantic literature, participation in public dances, etc.,—women are less able to endure abstinence. Woman lives essentially for love, and love is sexuality. In mild cases girls are moody, flighty, sentimental, and inclined to mysticism. Later there occur irritability, exaggerated emotionalism, blushing on the slightest provocation, flushing up when addressed by a man, confusion, timidity, stammering and a feeling of weakness when spoken to by a man, a fear of blushing, etc. Erotic fantasies color all their activities and give rise to a feeling of guiltiness and unworthiness. Suicidal ideas and impulses, as also the fear of insasity, are not at all uncommon.

The familiar portrayal of the "old maid" as pale, haggard, surly, moody, capricious, irritable, excitable, unsatisfied, discontented, and "cranky," is too frequently not an exaggeration of

the truth. That these manifestations and many, many more are due to abstinence is proved by the change that comes over her when she is happily married. The woman whose libido is gratified is bright, lively and happy; her eyes are animated, her step elastic, her voice sweet, her disposition amiable and cheerful; she has no aches and no pains; love dwells in her bosom and she radiates happiness on all who come under her influence. Her sister who does not obtain sexual gratification is anything from a confirmed invalid to a veritable Xanthippe.

Organic Disorders Resulting from Abstinence.—It has been very often denied that organic disorders may be dependent upon sexual abstinence; but there is absolutely no reason for rejecting the assertion of careful clinicians that a large number of ailments result directly from abstinence. Chief among these we may mention congestion of the testes, the so-called "painful testicle," testicular neuralgia, prostatic congestion, congestion of the seminal vesicles, orchitis, epididymitis, and even atrophy of the testes. In women we may safely attribute to sexual abstinence the occurrence of the following conditions: anemia, loss of flesh, congestion of the ovaries, ovarian neuralgia, leucorrhoea, dysmenorrhoea, amenorrhea, menorrhagia, metrorrhagia, endometritis, perimetritis, and a condition of thyroidism. The discussion of the pathogeny of these conditions is outside the scope of this essay.

Benefits Resulting from Voluntary Total Abstinence in Adolescents—Inasmuch as moralists and educators are so persistently advocating total abstinence in unmarried adolescents in the face of the constantly accumulating evidence of the injuriousness of such abstinence it is not alien to our purpose to at least enumerate the benefits accruing to the individual from a purposive refraining from sexual activities of every kind. All observers are agreed that up to a certain age, say, about 20 years, the exertion of the will in subduing erotic desires tends to steel the individual's character and to strengthen his will-power; it teaches one to forbear and renounce the gratification of the senses; it impresses one with the conviction that life has nobler purposes and more exquisite pleasures than the gratification of the flesh; it directs the individual's energies into other, more useful and acceptable, channels, e. g., education, religion, athletics, etc.; it teaches the value of perseverance; it keeps its votaries single till

they are fit to enter upon marriage; it secures to the individual that happiness which emanates from self-approbation, and—most important of all—it prevents venereal infection. In the propaganda of modern reformers chief stress is laid upon the dangers of contracting gonorrhea, chancroid and syphilis, and of becoming afflicted with all their possible complications and sequelae. In other words, the attempt is made to frighten young men and women into a life of abstinence. But the propagandists close their eyes to the following *facts*: abstinence is not chastity; that notwithstanding all their best efforts, some persons cannot be abstinent; the ill-effects of spending a large part or almost all of one's energies in the struggle against the sexual appetite outweigh the benefits; that fright is extremely liable to precipitate the individual into neurosis; that the individual and society suffer more from abstinence than they gain; that venereal infection does not necessarily result from non-marital sexual indulgence; that the venereal diseases can be stamped out and are going to be robbed of their terrors by specific remedies, and furthermore, that it is far more preferable to take one's chances with venereal infection than with total abstinence. The ill-effects of abstinence are far greater than those following venereal disease. And, if the truth must be told bluntly, not one individual in a hundred is wholly abstinent for any considerable time after puberty.

The sequelae of sexual abstinence as we have defined it are so numerous that it is impossible to do more than sketch them in the most meager outlines in these few pages, notwithstanding their tremendous importance to the individual, to society and to civilization. The most important pathological and psychological conditions predisposed to and resulting directly or indirectly from sexual abstinence are the following: masturbation, pollutions, spermatorrhoea, impotence, frigidity, homosexuality, perversions, true neurasthenia, apprehension neurosis, conversion hysteria, apprehension hysteria, phobias, compulsions, hypochondria, criminality, kleptomania, pyromania, melancholia, paranoia, dementia precox, etc.

Onanism—The most frequent, the most serious, and almost inevitable result of the attempt to live sexually abstinent after puberty is Onanism. By this we mean any form of sexual activity other than normal coitus between two persons of opposite

sexes; but in a more restricted sense onanism means the obtainment of sexual gratification by the manipulation of one's genitals. In consequence of the sexual hyperesthesia resulting from sexual abstinence there occur frequent erections, congestion and titillation of the genitals which indirectly lead the individual to touch his genitals or to squeeze them between his thighs; from this to masturbation is an easy step. Coitus interruptus, coitus condomatus, etc., perversions, homosexual practices, prolongation of the fore pleasure, etc., are in most instances only forms of onanism. Some form of sexual activity other than normal coitus is so universally practiced at certain periods that it may almost be said that onanism is a normal physiologic process. There is probably not one normal individual out of a hundred who has not masturbated at some time of his life, especially in infancy, childhood and early adolescence; but it is not at all rare at any period of life, in the single as in the married. Because of physical and psychological reasons masturbation is more easily accomplished and more commonly practiced among females than among males. In infancy onanism is physiological and is the expression of the normal autoerotism; in the sexual latency period masturbation is not as frequent and occurs probably as a result of instruction, seduction or a congenitally excessive sexual appetite and a diminished capacity for sublimation. After puberty it is the natural substitute for normal gratification in persons who for various reasons cannot obtain the latter; in the married it results from the failure of coitus to gratify the libido. Whenever the individual fails to find in his environment the means of gratifying the libido, the libido is introverted and the individual resorts to that means of sexual gratification which was characteristic of him in his infancy; for the time being he reverts to the infantile autoerotism.

But masturbation is only a poor and inadequate substitute for normal coitus. As a compromise between the normal, healthy gratification of the heterosexual love instinct and the desire to comply with the dictates of our morality and religious teachings, it is dangerous and unsatisfactory. Owing to the absence of the requisite forepleasure and the satisfaction of the human craving for love, masturbation really gratifies only one of the partial sex-components and there is no adequate discharge of the libido or accumulated sexual tension. As a result of this the individual suffers from a chronic toxemia which demands a frequent repeti-

tion of the masturbatory activities. The secrecy, the feeling of humiliation, and guiltiness with which these acts are carried out seriously impair the onanist's psyche and his character. His health suffers because of the excessive drain on his nervous energies. But the greatest danger of prolonged masturbation lies in the great probability of the fixation of the fantasies, conscious or unconscious, usually of an incestuous nature, which accompany the auto-erotic acts. In this way there may result a fixation of the infantile sexual aims or a persistence of psychic infantilism which constitute the chief predisposing factors for the subsequent development of a grave neurosis.

The habitual masturbator is always conscious of wrong-doing, fears detection, is aware of the injurious after-effects (depression, headache, lassitude, loss of appetite, etc.) of his "sinful" acts, and apprehends permanent injury to his nervous system. He becomes seclusive, reserved, shy, timid, suspicious, distrustful, —in other words, asocial. Bad cases resemble mild cases of paranoia. But it is also true that if the individual can react sufficiently, he may develop traits of a very admirable character, and be distinguished for veracity, frankness, sincerity, honesty, modesty, ambition, idealism, moderation, etc.

Pollutions.—Nocturnal seminal emissions are such frequent occurrences in persons living in sexual abstinence for any considerable period, and in those whose libido is not properly gratified, that many regard them as nature's method of relieving the tension in the genital glands, preventing auto-intoxication and diverting the mind from the sexual. If this were entirely true, nocturnal pollutions might be regarded as a sort of safety valve for the individual's sexuality. But, as a matter of fact, pollutions are no more a desirable or normal physiological vent for sexual substance than nocturnal enuresis is a normal relief for distention of the bladder. And, in truth, a pollution is not a manifestation of chastity or sexual purity, for it is invariably only the orgasm of a sexual experience in a dream (even though the dream be only latently sexual.) Pollutions are of great pathogenic significance in the production of functional neuroses because of the organic after-effects (headache, depression, fatigue, etc.), the humiliation at the sexual nature of the dreams, the shame of leaving traces on the bedding and underwear, the turning of the mind to sexual themes, the fear of the loss of one's

"manhood," and, if frequently repeated, the exhaustion of the nervous energies. Pollutions do not gratify the individual, either male or female, and involve him in psychic conflicts akin to those with which the masturbator has to contend. But if the pollutions are not too frequently repeated and the victims' minds are relieved from worry concerning them, they are robbed of their terrors and prove quite harmless.

Enuresis Nocturna.—From what we have learned from patients suffering from nervousness and also from healthy persons who have subjected themselves to a psychanalysis, we can confidently assert that in every instance where no organic disease of the urinary apparatus exists, bed-wetting, beyond the age of three years, in males as in females, is the physiologic and psychologic equivalent of a pollution. The enuresis represents the orgasm of a sexual dream and occurs chiefly, if not exclusively, in the sexually abstinent. The individual failing to obtain adequate sexual gratification from his environment, finds a substitute by unconscious regression to a form of infantile auto-eroticism. As may readily be inferred, its frequent repetition, especially in childhood and adolescence, and the dreams accompanying it may easily involve the sufferer in conflicts predisposing him to and involving him in psychoneurosis.

Diurnal enuresis and frequent urination, in the absence of organic lesions, have the same auto-erotic significance as nocturnal enuresis. The attempt to cure a so-called "weak bladder" by advising the sufferer to pass his urine in driblets, as advocated by many, will invariably convert the patient into a masturbator and not infrequently into a urethral erotist.

Spermatorrhea.—The diurnal emission of semen upon the slightest provocation, e. g., riding in a train, looking at representations of the nude, reading suggestive literature, handling garments or articles belonging to a person of the opposite sex (or the same sex in homosexuals), passing through an art gallery, sitting at stool, urinating, riding horseback, speaking to, seeing or kissing a person of the opposite sex, etc., are not at all uncommon manifestations of the sexual hyperesthesia resulting from the attempt to be sexually abstinent, to comply with the approved morality of society as at present organized. The frequent recurrence of such involuntary emissions cause the victims a great deal of worry concerning their health and future sexual vigor be-

sides worrying them about their chastity. The depression resulting from nocturnal and diurnal pollutions can be appreciated only by a psychanalyst or sexologist.

Satyriasis and Nymphomania.—Prolonged abstinence in a person endowed by nature with a high degree of sexuality not rarely results in a condition resembling a true satyriac mania. Every act and thought is colored by erotic fantasies. The patient is so hypersensitive sexually that every slightest thing or occurrence that stands in direct or indirect (symbolic) relationship to the sexual gives rise to erections with or without emissions, or to pleasurable sensations in the genital organs. Speaking to a person of the opposite sex (or of the same sex in homosexuals) excites the individual to such an extent that his heart palpitates, he trembles, blushes, gets dizzy, is confused, feels hot and cold in turns, and so forth. In the analysis of these cases, the masochistic and perverse instincts will be found to play very prominent rôles.

Day-dreaming.—The indulgence in day-dreams is a prominent characteristic of those who do not obtain sexual gratification in the world of reality. The fantasies, which may be unconscious, represent the abstainer's refuge from his discontent into the world of dreams where he may fulfill his secret wishes to his heart's content, without molestation or fear. These wishes are invariably of an erotic or ambitious kind, and even behind the latter the erotic can easily be recognized. In all such day-fantasies the sadistic, masochistic, incestuous and perverse sex-components can easily be discovered. In reality, every day-dream is a kind of psychic masturbation and brings the individual nearer to a psychoneurosis.

Homosexuality.—As a result of the natural bisexual constitution of man, we are all homosexual to a certain extent, though in the course of the individual's evolution to maturity, the homosexual component is repressed and sublimated. But if after puberty, the danger period for the normal evolution of the sexual instinct in our adolescent boys and girls, the heterosexual love instinct is not or cannot be gratified and must be suppressed, the main stream of the libido is blocked and dammed back into the homosexual tributary. Passionate friendships between persons of the same sex are really manifestations of homosexuality. As a compromise between the homo- and hetero-sexual impulses within

the psyche, the abstainer resorts to masturbation, and inasmuch as this is really a return to a form of infantile eroticism, the earliest form of sexual gratification, there is great danger of the reawakening and revivification of the repressed incest complex. How readily and frequently and naturally homo-sexuality is practiced where normal coitus is interfered with for any reason (inaccessibility of the hetero-sexual love object, lack of love between husband and wife, the dangers of hetero-sexual intercourse, etc.) is manifest from what we know concerning the doings among soldiers in barracks, sailors on board ship on long cruises, prisoners in jail, boys and girls in boarding schools, etc. The sexual aim in these cases is mutual masturbation, intercourse per anum, or a mere effusion of love. Under favorable conditions most of these fortunately return to normal hetero-sexuality. But if for any reason this reawakened homo-sexuality lasts for a considerable length of time, there is great danger of the psychic fixation of the inversion and subsequent hetero-sexual impotence as well as a predisposition to a psychoneurosis, alcoholism, criminality and paranoia.

Perversions.—Psychanalytic investigations have proved that all human beings are by nature polymorph-perverse, i. e., they have within them the capacity and the inclination to obtain sexual gratification by perverse practices, e. g., sadism, masochism, exhibitionism, voyeurism, pederasty, fellatorism, etc. It is true that in the course of evolution from the pansexualism of infancy to the so-called normal hetero-sexuality of adults these perverse elements or components of the sex-instinct are repressed; but this repression is not complete, for rudiments or traces of these perversions are constituents of the normal sexual aim, i. e., are manifested during and preceding coitus, e. g., kissing, looking, hugging, touching, talking, stroking, biting, pinching, etc. In general these actions are not regarded as sexual acts. Now, if a person (be he single or married) endowed with a strong sexual instinct, or (and) one whose sexuality did not undergo a normal evolution because of infantile and childhood psychosexual traumata, cannot gratify the cravings of his sexual instinct after reaching maturity, the further normal development of his sexuality is interfered with, the primacy of the genital zone is prevented from being established, the libido is withdrawn from the outer world (i. e., is introverted) and driven back into any one of the

subsidiary branches of the libidinous stream. In this way any one of the sexual instincts or partial impulses may assume dominance. The repressed energy then finds expression either as a perversion or in the symptoms of a psychoneurosis. The frequency of perverse practices among abstainers is notorious, but it is not so generally known that in a large number of cases a boasted abstinence is only a mask to conceal a perversion. The dangers of a fixation of a perversion ought to be obvious.

Bestiality, Etc.—Without going into details, we may say that the not infrequent resort of human beings to sexual relations with animals is no more a sign of degeneracy or insanity than perverse or homosexual practices, and that the cause of this degrading vice is to be found in infantile sexual traumata and the difficulties that our modern marriage system interposes between the individual and the gratification of the normal instinct. So, too, if the normal sexual object is inaccessible or the realization of the normal sexual aim is for any reason deferred too long, *fetichism*—the substitution for the normal sexual object (a person of the opposite sex) of some other object (a part of the body or an article of clothing, etc.) related to it but totally unsuited for normal coitus—may result and become permanently fixed in the individual's psyche. *Assaults on children*, as is well known, are frequently perpetrated by teachers and domestics, and are due solely to sexual abstinence. *Incestuous practices* between parents and children are almost invariably due to marital unhappiness or to psychic or other hindrances to the adult's gratification of his or her sexual aim.

Criminality.—As we have seen, owing to the numerous and often insurmountable obstacles to the gratification of the overpowering sexual impulses in adolescents and adults, especially in the former, the individual is put to the extremely difficult task of sublimating his wishes and instincts or of suppressing and repressing them. In the unconscious, the repressed incest complex, inversion and perversion complexes, become charged, as it were, with the newly repressed energies. In consequence of this, the individual feels himself dimly impelled to gratify perverse longings, to do something that society and morality condemn as being criminal, i. e., against the best interests of the species. This impulsion to "do wrong" or "go wrong" cannot remain repressed forever and expresses itself either in some criminal act

or in the symptoms of a psychoneurosis. That environmental conditions and education, etc., also have their share of responsibility in the formation of a "criminal" is not denied. But from our point of view, criminality is very frequently the expression of a neurosis, of an impulse obsession to wrong-doing. As Wulffen puts it: "criminality is repressed sexuality and an equivalent thereof." This is best illustrated in pyromaniacs and kleptomaniacs. It has for some time been known that *kleptomania* (shop-lifting) occurs chiefly in strongly libidinous women whose sexual hunger is not satisfied and who haven't the courage or opportunity for sexual gratification. In all cases the theft is the symbolic performance of the coveted forbidden act; they have substituted one wrong, the lesser, for another,—in other words, the affect was transferred from the sexual to the criminal. It is interesting in this connection to note that the objects stolen stand in symbolic relationship to the sexual, e. g., purses and bags, parasols, umbrellas, silk handkerchiefs, etc., and are not stolen for their intrinsic value. *Pyromania* occurs chiefly in adolescent males, and occasionally the offender admits to having had an orgasm at the sight of the mounting flames and excitement. The symbolic significance of fire (=passion), in the minds of most human beings furnishes the explanation for the obsessive impulse in the abstinent. What share the toxemia of sexual abstinence and the various partial impulses play in the awakening of the latent tendency to criminality inherent in all humanity cannot be discussed here.

Alcoholism.—While the psychology of chronic alcoholism (or dipsomania) is not yet fully understood, psychanalytic researches warrant the conclusion that notwithstanding the victim's placing of the responsibility for the habit on social usages, family squabbles, business troubles, etc., the true causes lie in the unconscious. In other words, the alcoholic habit, like criminality, is a neurosis resulting from the partial failure of the repression and sublimation of certain asocial trends or desires. Chief among these is the homo-sexual component, as is evident from the alcoholic's dreams and delirious fantasies, from the habit of drinkers of the same sex to congregate, from the vulgarity or smutty jokes indulged in at such meetings, from the passionate protestations of love and friendship by drinkers to each other, from the tendency to homosexual practices among them, from their not infrequent

delusions of persecution, and, by the mechanism of projection, from their characteristic jealousy of their marital partner. In most of these cases the individual's repressed homopsychic component was reawakened and recharged with energy as a result of the impossibility of gratifying the libido by normal hetero-sexual object love. As other important factors in the yielding to the craving for spirituous liquors, we may mention the unconscious desire to gratify the sadistic and masochistic instincts, the desire to relieve the psychic tension by temporarily blotting out the knowledge of his affairs, and, finally, the gratification of the auto-erotic impulse. The significance of auto-erotism in the psychology of alcoholism was very interestingly pointed out by Juliusburger. Akin to the satisfaction derived by the alcoholic from the erogenous function of the mouth zone is the pleasure of the inveterate smoker, chewer and candy-eater.

Impotence—The most frequent and most dangerous sequel of prolonged continence is some form of partial or complete sexual impotence. The prolonged suppression of the most powerful "animal" instinct necessarily results in a partial atrophy of the genital glands by reason of their non-use and the absence of that summation of sexual stimuli which is essential to sexual vigor. Long continued voluntary abstinence develops in the individual an asceticism bordering on masochism and an ever increasing aversion for the female and everything suggestive of sexuality or "bestiality," as he now terms it, and thus there is brought about a gradual and progressive weakening of the libido which may go on to the point of total extinction or psychic castration. And thus our so-called morality and a religion not adapted to the natural constitution of man result in a quenching of the sexual desire, in other words, in a fixation of abstinence. Such persons have lost the capacity for love. Even those who have not gone as far as this, worry so much about the manifest diminution of sexual power and the pollutions and spermatorrhea complicating their abstinence, that there is a further impairment of the libido and sexual vigor. The fear of impotence resulting from abstinence, pollutions, masturbations, etc., is not infrequently the cause of partial impotence and other symptoms of a neurosis. In many the longing for love and the capacity for its enjoyment are almost wholly destroyed by the fear of the consequences of heterosexual coitus, e. g., venereal disease, progeny, etc. But the greatest peril

of sexual abstinence is the certainty of the abstainer resorting to masturbation with conscious or unconscious incestuous fantasies. This form of auto-eroticism is so convenient, so pleasurable, and so free from certain dangers characteristic of a normal vita sexualis that the habit becomes so fixed in the psyche that the masturbator loses his ability to transfer his love upon a person of the opposite sex and finds normal coitus only a poor and unsatisfactory substitute for masturbation. The premature emission (ejaculatio precox) which is so characteristic of the former masturbator expresses his discontent with his partner, his disappointment in the so-called normal heterosexual love as compared with the delights of auto-erotism. Thus the chastity of adolescents advocated by masochistic and impotent propagandists is the worst possible preparation for marriage, and if a disciple of their teachings marries, the union is bound to be an unsatisfactory and unhappy one. Sooner or later attempts at coitus are given up altogether and therewith the prop of marriage is gone. The descensus Averni need not be pursued further.

Frigidity.—Much of what we have said in the former paragraph about the mechanism and psychology of impotence in the male applies literally also to frigidity in the female (dyspareunia). But in women the results of the concealment from them and suppression in them of everything pertaining to the sexual and the prolonged abstinence imposed upon them are much more damaging and lasting than in the male. Our hypocritical morality does not wink at illicit and purchased pre-marital coitus in the case of women. A girl is theoretically brought up so as not even to know the existence of the sexual impulse. The forces of disgust, shame and morality are so over-developed in them that everything pertaining to the sexual is regarded by them as animal, bestial, vile, disgusting. Thus it frequently happens that a normal, healthy, affectionate girl past the age of puberty finds herself involved in a serious conflict between her awakened and imperious libido, on the one hand, and the various inhibiting forces on the other. She wages a conflict that is too much for her as long as she can and then—failure. If she does not fall—and when a woman falls she falls on her back—she resorts to masturbation, develops a neurosis or a psychosis, or commits suicide. As a result of the prolonged auto-erotic gratification with conscious or unconscious incestuous fantasies—a manifestation of

the regression of the libido—there ensues an inability to transfer her love upon a strange male and she is partially or wholly frigid. She has so long been accustomed to obtaining gratification from the titillation of the clitoris or labia minora (which play almost no part in coitus) that the titillation of the vaginal mucosa by the penis is ineffective to bring about the discharge of the libido. And so it often happens that a woman has to masturbate immediately after coitus to relieve her excited tension. In consequence, many of these women worry about their inability to gratify the husband, about being sterile, about not loving their husband, about their disappointment in married life, about their wickedness and sinfulness, etc. Without sexual gratification for both husband and wife, domestic happiness and harmony and indulgence in each other's shortcomings are impossible. Marital happiness is frustrated by the long preparation for it. And thus the woman's fixation in abstinence or in auto-erotism is of the greatest consequence to the individual as to society. In some women the idea of sexual pleasure is so intimately associated with the idea of a forbidden act that they cannot obtain gratification from approved and proper marital coitus,—to enjoy the act they must do something forbidden. Thus our false education of girls predisposes to adultery. In another set of cases the fear of pregnancy and of venereal diseases bring about a temporary psychic impotence. In others the husband comes so short of the ideal, usually the father or brother, to whom the woman's love is unconsciously anchored, that she cannot identify him with the object of her unconscious incest fantasy and consequently cannot transfer her love upon him and is frigid. Psychic perversion and inversion, i. e., fixation in some stage of psychic infantilism, also unfit a woman for normal heterosexual love. Partial or total impotence in the husband is a very frequent cause for a woman's frigidity, but much more frequently the wife of such a man finds herself in a terrible conflict between propriety and unsatisfied longings; the outcome is either infidelity or neurosis.

True Neurasthenia.—Inasmuch as I have dwelt at length upon True Neurasthenia, from the Freudian point of view, elsewhere (*Critic and Guide*, July 1912), I shall only say here that this disease follows invariably in the wake of excessive masturbation and too frequent pollutions. The relationship of sexual abstinence to masturbation and pollutions is evident from what has

preceded. The classical symptoms of this neurosis are pressure on top of the head, sleeplessness, spinal irritation, diminished power of attention, diminished capacity for work, impairment of the memory, increased susceptibility to fatigue, emotional irritability, dyspepsia, flatulence, constipation, paresthesias, depression and diminished sexual potency. The pathogenesis of the disease depends upon four factors: a chronic toxemia from the incomplete elimination and metabolism of certain hormones (thyroid, prostatic, testicular, ovarian, etc.); the psychic conflict between sexual desire, on the one hand, and the feelings of guilt, shame and remorse which accompany the masturbatory activities, on the other; the excessive output of psychic energy demanded by masturbation as compared with coitus, and, fourthly, the inadequate relief of sexual tension furnished by substitutes for normal coitus. True Neurasthenia is frequently associated with Apprehension Neurosis and constitutes an excellent soil for the development of a Hysteria.

Apprehension Neurosis.—This condition, too, I have described elsewhere (*Critic and Guide*, Dec. 1911; *American Medicine*, Dec. 1911) and shall therefore not go into details at this time. It is one of the fundamental doctrines of the Freudian school that without some disturbance in the vita sexualis there can be no neurosis. Every such disturbance, however, implies the insufficient and inadequate elimination of the accumulated libido, no matter how this is brought about,—in other words, non-gratification of the sexual instinct (sexual abstinence) is at the bottom of every neurosis. In apprehension neurosis the physical causes of inadequate gratification predominate, notably the abrupt introduction of innocent girls and newly married young women to gross sexual experiences, coitus interruptus, coitus reservatus, coitus condomatus, ejaculatio precox, the ardent futile embraces of engaged couples, widowhood, a disproportion between desire and potency (in the climacterium of women and senium of men), and voluntary sexual abstinence (especially after a long career of masturbation). Mental factors also play a part in these cases, but we reserve their consideration for the section of the Psychoneurosis where they play the leading rôle. In consequence of these various conditions the psycho-physiological sexual excitation is not eliminated either somatically or psychically but is stowed up or accumulated; being diverted from the normal aim

the sexual excitations manifest themselves psychically as morbid apprehensions and physically as somatic symptoms. The morbid apprehension which is the main feature of the disease is a derivative of the repressed sexuality as well as a reaction against it. Apprehension neurosis may thus be said to be the result of and a substitute for unsatisfied love. The part played in the pathogenesis of the disease by the disturbance in the chemistry of the libidogenous substance and hormones is still a matter for future investigation. So, too, the exact rôle of psychic conflicts, introversion of the libido, and reanimation of old infantile conflicts, have not been definitely established. The symptoms are so numerous and occur in such various combinations, continuously or in attacks, and involve so many different parts of the body, that it is impracticable even to enumerate them in this place. Among the circulatory and respiratory disturbances we have tachycardia, brachycardia, phrenocardia, dyspnoea, sobbing, thoracic oppression, and asthmatic attacks; in the vasomotor sphere we have sudden congestions, redness or pallor, chills, goose skin, etc.; in the secretory and execretory spheres we have dryness of the mouth, diminution of the gastric juices, outbreaks of perspiration, polyuria, pollakiuria, diarrhea, polydipsia, etc.; in the sphere of the involuntary muscles, globus, strangury, pollutions, constipation, colicky pains, etc.; in the gastric sphere, loss of appetite, nausea, vomiting, voracious hunger, pyrosis, etc.; in the motor sphere, great restlessness, purposeless moving about, trembling, twitchings, etc.; in the sphere of the sensory nerves, paresthesias of all sorts, neuralgic pains, excessive sensitiveness to light, hyperacousis, etc. Among many other symptoms we shall mention only a marked general irritability, distressing insomnia, moodiness, crankiness, worrisomeness, abnormal apprehensiveness, locomotor vertigo, localized edemas, dermographia, urticaria, occupation neuroses, nightmares, distressing dreams, dizziness, fainting spells, certain phobias, a diminution of sexual desire, etc., etc.

The Psychoneuroses.—Under this term we include Conversion Hysteria, Apprehension Hysteria (Phobias), Obsessive or Impulsive Ideas or Acts, certain forms of Epilepsy, etc. We may state it as a result of psychanalytic investigations that in the evolution of every psychoneurosis there are three stages: (1) That of infantile fixation or disturbance of the libido; (2) That of repression and (3) That of symptom formation. As a result

of certain experiences in the infancy of persons of a peculiar psychosexual constitution there occurs an interference with the normal evolution of the libido, or, in other words, a fixation of some particular phase of the individual's sexuality. During the lives of all of us there occur all sorts of experiences and wishes of a sexual nature the recollection of which—for reasons of shame, disgust, conscience, etc.—is disagreeable to us, and which we strive to forget (to repress). As a result of the dynamic nature of these repressed processes there results a conflict between these two antagonistic forces; the censured wish that is seeking to realize itself consciously and the forces that strive to keep all knowledge of these wishes out of consciousness. Subsequently, as a result of the various physical causes of inadequate sexual gratification that we have enumerated in the preceding section and the accompanying psychic conflicts, the libido is withdrawn from the disappointing world of reality and introverted, and the repressed infantile desires are recharged with energy.

The psychic factors e. g., repressed infantile sexual components (fixation of the libido on one or other parent, masturbation, etc.), a homosexual tendency, a perverse tendency, etc., play the most important rôle in the individual's inability to gratify his libido. For physical and (or) psychic reasons the individual cannot consume the accumulated libido and morbid apprehension necessarily results. The attempt at repression does not succeed and there follows a compromise between the repressing force and the repressed desire. This compromise constitutes the symptoms of the neurosis. We may say, then, that the symptoms of a psychoneurosis are the disguised fulfillment of unconscious desires; in other words, the symptoms are the equivalents of and substitutes for the patient's sexual activities. In all these cases the free floating fear which represents the unconsumed libido attaches itself to any one or more of the pathogenic complexes that exist in abundance in all of us and so give rise to all sorts of phobias. The rôle played by the erogenous zones and the mechanism of the production of the great variety of puzzling symptoms cannot be entered upon here. Nor can we now take up the discussion of the influence of psychic conflicts and an unsatisfactory sexual life, upon the chemistry of the internal secretions and the relationship of this to the process of symptom formation. The influence of heredity is also not to be overlooked in this connection, any more than the banal factors (shock, worry, illness, etc.) to which most writers—erroneously—attach prime importance.

The Psychoses—Most observers are agreed that the development of certain psychoses is favored by sexual abstinence by virtue of the depression resulting from suppression of the libido and the exhaustion of mental energies in the effort to overcome the sexual cravings, etc. That there is a great deal of truth in this belief is evident from the frequency with which dementia precox (paraphrenia) and other psychoses break out in the period of adolescence which, as we know, is a particularly dangerous period for all individuals who by constitution and heredity are predisposed to a neurosis. Of the mechanism of the evolution of the psychoses, with the exception of paranoia, we know as yet very little. Freud and Ferenczi have shown that very often, perhaps always, paranoia develops as a defensive reaction against the irruption of the repressed homosexuality in individuals in whom certain injurious banal factors acting upon a fixed infantile "narcismus" have undermined or destroyed the sublimation of the homosexual impulse.

To anyone who has thought at all about the sexual life of the cultured races it must be evident that our treatment of the subject is anything but complete. We have said and suggested very little about the deleterious influence of sexual irregularities on the character of the individual, the injury to society resulting from the diminished working capacity of persons struggling with their sexual desires, the great economic loss resulting from the steady increase of neurotics (which keeps pace—step for step—with the heightening of sexual restraints), the greatly diminished joy of life and general discontent and apprehensiveness, the injurious influence of parental disharmony and neuroses on the development of the children, and the prevalence of prostitution and venereal diseases. We are paying too high a price for our theoretical morals,—morals for which we are not fitted by constitution. And it is this conflict between our natures and our hypocritical morality that makes of us—especially Americans—a nervous, unhappy, pessimistic, money-grubbing, and loveless people.

How is this melancholy state of affairs to be remedied? Because of the medical and sociological significance of the many difficult problems touched upon in the preceding pages we shall outline, though briefly, such measures as seem likely to remedy and prevent the conditions enumerated as well as to assist the race in its cultural progress. As to the treatment of the various or-

ganic and functional diseases, the actual neuroses and the psychoneuroses, by general medical measures and by some form of psychotherapy, preferably psychanalysis, we shall say nothing at this time. Prevention is better than cure—and cheaper and more certain.

1. Infancy and Childhood.—The psychosexual traumata, real and imagined, that occur during the first six years of life determine the occurrence of a psychoneurosis later in life. Anything that occurs later in life acts only as exciting cause and supplies the energy that reanimates and activates the repressed infantile complexes and desires. If, then, the increase of the neuroses is to be arrested, all our attention must be directed to the period of infancy. Parents and others entrusted with the rearing of infants must be instructed along the following lines: not to stimulate and excite the children sexually by rocking them, kissing them often, kissing their genital or gluteal regions: irritating the genital and anal zones when cleaning, bathing or dressing them; pacifiers, nipples and milk bottles should not be left in their mouths for a long time; they should not be permitted to sleep with their parents or where they can overhear sexual embraces; everything suggestive of the coarse sexual should be carefully kept from their eyes and ears; they should not be left lying in soiled or wet diapers for any length of time; the functions of the bladder and rectum should be looked after simply and in a business-like way, without any ceremonial or excessive fussing; rivalries and jealousies between children should be guarded against in every way possible; the parents must refrain from quarreling, so as not to elicit the sympathies of their children on behalf of the one or the other parent and so teach them too early to love and hate; the child's sexuality must not be prematurely awakened by expending too much love upon it; undue severity with a child is as dangerous as excessive fondling and pampering; young children should not be permitted to see their parents naked or in the performance of their excretory functions, etc.; but in all these things the parents must avoid giving the child the impression that they are concealing anything from it or that there is something to conceal. That the children must be carefully guarded against being sexually abused or enlightened by companions, domestics and tutors, goes without saying. Exciting tales of adventure, cruelty, cunning

and ghosts, must be strictly tabooed. Infantile masturbation in moderation should be wholly ignored, as it is harmless and universal; if practiced to excess it shows that the child is already suffering from a neurosis and in need of skillful medical attention. In trying to break a child of the masturbatory habit it is of the utmost importance not to threaten or frighten it. The games of little boys and girls should be supervised by their elders. Corporal punishment, especially spanking the gluteal region, in sport or in earnest, should be refrained from. Above all it should be borne in mind that young children are very suggestible; humiliating comparisons with other children should be shunned like wildfire; favoritism should not be permitted to occur and the weakness of children should not be brought home to them. Other precautionary measures along these lines will readily suggest themselves to intelligent parents and learned physicians.

2. Sexual Education.—Without going into details I shall only say that a child's curiosity as to sexual matters, the distinction of the sexes, the source of children, etc., is to be satisfied exactly in the same manner and spirit as his curiosity regarding anything else that vexes his infant mind. This must be done privately, by either parent, simply, tactfully, truthfully, beautifully—and wisely, without fuss or ceremony, and in accordance with the child's understanding. The parent of the future must be educated to this and how to do it. The classroom is no place for such instruction.

3. Schooldays.—During the schooldays the child must be guarded against the reawakening of the repressed sexuality by perverse playfellows. This applies particularly to the years preceding puberty, the most dangerous period for the developing boy or girl. Erotic "literature" of every description, decent and indecent, especially the latter, is devoured with avidity at this time and works incalculable damage. The sexual education of the child is to keep pace with his or her development. Sports and pastimes that are capable of arousing sexual feelings and desires, e. g., wrestling, swinging, carousal riding, certain dances, etc., should be discouraged. Nothing is so likely to plunge a maturing boy or girl into some form of masturbation as sitting over long and difficult lessons after school hours; the tasks assigned to children for homework should be light and

should require only very little time. In the class-room children should be given plenty of time in which to perform the work assigned them; hurrying a child or standing over him excites him so that he is very apt to masturbate. For the same reason the strain of preparing for and passing examinations should be abolished: every competent teacher knows what pupils are fitted for advancement.

4. Adolescence.—Much of what has preceded applies literally to the period following puberty. With the occurrence of sexual maturity sexual desire is awakened and, in healthy individuals, cannot be repressed without danger. Nature takes no cognizance of artificial economic or sociologic barriers to the gratification of the libido. The sexual instinct may be maltreated and fretted but it cannot be played upon. A large portion of the libido may be sublimated into work, athletics, literature, art, ethics, religion, etc., but it is impossible wholly to divert it from its natural ends (pleasure and procreation). Modern civilized life is so full of sexual excitants that no normal human being can avoid coming under their influence, and even if he could, nature would not permit it. To frighten adolescent boys and girls into abstinence by exaggerated portrayals of the consequences of gonorrhea, chancroids and syphilis, is as immoral as it is futile, and extremely apt to beget a large number of venerophobes. To teach girls that the sexual is vile, degrading, or bestial, is to make them incapable of love and to become responsible for their marital frigidity, misery and infidelity. Masturbation should be discouraged because of the great temptation to its frequent repetition; but if it is practiced in moderation, when the sexual furor cannot be appeased in any other way, and without the simultaneous indulgence in fantasies, it is harmless. Fortunately we physicians will rarely be called upon to teach any one how to masturbate. Nature has attended to that for us. But in case of need, we should not hesitate to perform our plain duty. In our present sociological régime masturbation for boys and girls of a certain age, endowed with a certain amount of sexuality, is an absolute necessity and may save them from a grave neurosis or a career of crime.

5. Prostitution.—That the sexual cannot be wholly suppressed is tacitly admitted by modern morality's sanction of the double standard for men. But if prostitution is prohibited for

women, it should also be prohibited for men. That prostitution is a poor, inadequate, and dangerous substitute for a normal sexual life is clear from what has preceded. If, however, it is to be permitted to continue, it should be licensed, segregated, properly supervised, and there should be no calumny attaching to one resorting to it.

6. Early and Terminable Marriage.— A fairer, more equitable, more salutary, and more proper way out of the dilemma, however, is to so modify our marriage system as to make it possible wholly to do away with prostitution, prolonged abstinence, etc., and to enable adolescent and adult men and women to lead a normal sexual life. As soon after or about the age of twenty—the "romantic age"—as men and women find a vita sexualis necessary for their health they should be encouraged to marry without regard to their financial status. If the newly married couple cannot or do not wish to go into housekeeping, they should continue to abide with their parents or with the parents of either of the contracting parties until they decide to live together by themselves. Unhappily married couples should be permitted to sever their relationship more esaily than at present, somewhat along the lines outlined by Ellen Key in her book, "Love and Marriage." Incurable ejaculatio precox, impotence, venereal disease, frigidity, incompatibility, adultery, insanity, desertion, non-support, inversion, perversion, etc., should be sufficient grounds for divorce. Love, and love alone, should be the basis for marriage,—if the psychic health of the race is to be saved.

7. Prevention of Conception.—The greatest obstacle to early marriage is, without exception, the great probability of parenthood and the expense, responsibility and sacrifice, associated with the rearing of children. So, too, in the married the desire to avoid a numerous progeny is the cause of refraining from coitus or resorting to various tricks to frustrate the procreative instinct. How these procedures favor the development of the psychoneuroses, prostitution, the gradual estrangement between husband and wife, adultery, etc., is obvious to one who has followed our thesis. To prevent all this, our laws must be so modified as to permit physicians to instruct men and women in the art of preventing conception. No physician who has seen the benefits of such instruction in restoring marital happiness and

in doing away with distressing symptoms can have any doubts as to the wisdom of the policy herein advocated.

8. Licensed Abortion.—Until the medical profession has perfected a method of preventing conception in a non-castrated female it should not be illegal for a duly licensed physician to induce a miscarriage at any time during the first three or four months of gestation.

9. Psychanalysis.—Finally, as one of the most valuable prophylactics against the occurrence of the actual and psychoneuroses, of psychic impotence, of alcoholism, of criminality, of masturbation, etc., the psychanalysis of every maturing boy or girl that shows the slightest signs of "nervousness" is to be highly recommended. For this purpose a board of trained psychanalysts ought to be connected with every public school, orphan asylum and reformatory.

Along these lines must our efforts be directed if we are to insure the physical, mental and moral health of the race.

Contributed to the American Journal of Urology and Sexology.

CALCULI OF THE URINARY BLADDER CAUSING EXTREME RETENTION.*

By John C. Spencer, M.D., San Francisco, Calif.

PATIENT, male aet 78, presented himself on October 7th, 1915. In spite of being a man of brilliant mind and strong character, he gave a rather vague and meager clinical history.

Thirty six years ago had lues. This had been rather energetically treated at that time, but in the absence of accurate methods, patient was the subject of a well-marked syphilophobia.

Many years previously he had been through two severe pneumonias leaving him much incapacitated physically.

He had had gonorrhea on three occasions at fairly widely separated intervals. About five years ago he first began to notice difficulty in urinating. The stream lacked force and the act was prolonged. Gradually urination became more frequent diurnally and nocturnally. He has had complete control until within the last few months diurnally, but has had to wear a rubber urinal because of nocturnal enuresis.

Status Praesens. Appearance and general body habitus, senile. Appetite fair, bowels chronically constipated. Musculature flabby, panniculus well-developed over the trunk. Vision rather poor. Some irritation of the left eye, which was subjective. Inspection of thorax and abdomen revealed the following:—

Cardiac impulse was very forcible, causing a synchronous tremor of the entire thoracic and abdominal parietes. There was a diffuse systolic bruit heard most distinctly over the cardiac apex. There was moderate cardiac enlargement in all dimensions. Lungs apparently normal. No enlargement of liver or spleen.

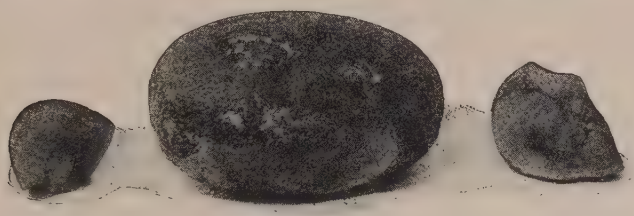
The entire hypogastrium and the lower half of the umbilical quadrant were completely filled by a firm, prominent, movable tumor yielding a flat percussion-note. .The tumor was not compressible. The superficial arteries were more or less tortuous and thickened. Pulse was hard and full.

Palpation of the prostate gland, showed marked enlargement although its complete delineation was not possible owing to the pain caused by even the most gentle palpation. Patient then passed

* Read before the Urological Section of the San Francisco County Medical Society, November 30, 1915.

about 150 c.c. of hazy, opalescent urine. A filtered specimen showed a small amount of albumin. No sugar. Spec. Grav. 1010. Microscopically there were a few pus-cells and many epithelia from the deep and superfial layers of the bladder mucosa. . No blood or tube-casts. There was a slight oedema of the lower third of each leg, extending about a handbreadth above the shoe-tops.

A No. 15 F., soft rubber catheter was introduced into the bladder with some difficulty and considerable pain, with a view of removing a judicious amount of urine from the much overdistended bladder. About 500 c.c. were withdrawn, the eye of the catheter showing a cylindrical clot. Hexamethylen tetramin was ordered and a combination of Salol and Santal oil. Owing to the amount of



prostating reaction, catheterization was not repeated until 48 hours had elapsed. The soft rubber catheter met with an insuperable obstruction in the deepest part of the prostatic urethra. Resort was had to a gum-elastic bi-coudee' instrument with alypin and epinephrin solution and copious amounts of gomenol-almond oil (10%), upon the assumption that previous catheterization had produced a trauma. Following the withdrawal of about 1000 c.c., 250 c.c. of a 10% sol. of silvol were injected and left in the bladder. With each catheterization the same difficulty about getting the instrument to enter the bladder was experienced. Some times there was slight bleeding, at other times, none. There was no spontaneous bleeding. The amount of urine withdrawn at each catheterization being increased, at the end of a week the bladder was completely emptied at each seance, always yielding between 2000-2500 c.c. of fluid. This was continued for 18 days when a complicating orchitis caused a suspension. Under continuous compresses of sat. sol. of magnesium sulphate the orchitis practically subsided in three days, and catheterization was resumed. Wassermann-test was found to be negative. From the outset suprapubic drainage was recommended but demurred to by patient's family up to this point. On the 28th day after his first visit, by way of

preparation for a suprapubic cystotomy, his bladder was emptied of 2580 c.c. of very purulent urine. The bladder was irrigated with a 4% sol., of boric acid until the fluid returned clear. After a preliminary injection of morphine-atropine under nitrous oxid-oxygen anesthesia a suprapubic buttonhole incision was made.. Digital exploration of the bladder interior revealed a group of calculi, partially encysted, located directly over the internal opening of the urethra. These were removed and consisted of one larger flattened oblate and two smaller angular, irregularly-shaped calculi. The exterior of each was smooth and brownish-black. On one side of the larger one there was a smooth excavated hollow in which one or both of the smaller ones articulated with the larger one and with each other. The articulating surfaces were perfectly smooth and lamellated, being yellowish-white in color. The composition of all three was phosphatic. The largest stone measured 47x28x18 mm., the smaller fragments respectively 16x17x12 mm., and 18x12x10 mm. The total weight of the calculi was 25.38 gmmes.

Drainage and irrigation at frequent intervals were established and maintained until the 9th day following operation when the patient died, having gone slowly but progressively down hill.

As no post-mortem examination was allowed, it was impossible to establish any verification of the total anatomico-pathologic conditions. The reporting of this case seems justified on the following grounds:—

First.—The unusual degree of retention.

Second.—The cause of the retention, and the unsuspected cause of the difficulty in catheterization.

Third.—The absence of the usual symptoms of bladder-calculus.

This latter feature explains the failure to pass a metallic instrument and reason for no X-ray plate having been made. Either of these procedures would certainly have revealed the presence of the calculi. In that event the route of election for their removal would have been the suprapubic one.

By way of final comment, it seems quite remarkable that this patient should have passed through as many professional hands as he certainly did, without the discovery of at least his extreme degree of retention and a further search for its cause.

Translated for The American Journal of Urology and Sexology.

THE ACTION OF ROENTGEN RAYS ON THE SEXUAL GLANDS AND FUNCTIONS

By Dr. H. E. Schmidt, Berlin.

THIS review is intended to sum up what we know about the action of X-rays on the sexual organs and functions. If I do not mention all of the authors who have written on this subject it is not to be understood that I regard their work as in any way less worthy.

In 1903 Albers-Schönberg succeeded in rendering rabbits and guinea pigs sterile by radiating the abdominal region, without, however, diminishing the libido or the potentia coeundi. Histological examination showed grave injury to the epithelial lining of the testicular canals. With a sufficient dose the lining was completely destroyed and sterility induced permanently. (Frieben, Seldin). Buschke and H. E. Schmidt showed in 1905, that not all of the epithelial cells were injured to the same extent. The spermatoblasts were most readily attacked while the supporting tissue (Sertoli's cells) which has no part in the formation of spermatozoa was quite uninjured. The lining of the vas and of the vascular system was not injured. The intermediate cells between the canals showed proliferation when the intensity of the dose was sufficient to destroy the spermatoblasts. It is these intermediate cells which are responsible for the potentia coeundi and this explains why that power remains after the spermatozoa are entirely destroyed. A regeneration of the spermatoblasts is possible both in men and animals, as Simond's investigation showed.

The spermatoblasts are destroyed at a dosage too slight to cause any cutaneous reaction. Phillips showed that sterility in men could be induced by radiation. He radiated the testes of tuberculous patients and produced complete azoospermia and atrophy of the testes six months afterwards without any change in the potentia coeundi.

Albers-Schönberg, Tilden Brown, and Osgood found that physicians working with X-rays were rendered sterile without affecting the libido, even where they were subjected to very light radiation.

The sterility induced may be temporary or permanent, depending on the intensity of the radiation, or the number of exposures.

One physician who had been exposed without any protection developed azoospermia which persisted even after a lead screen had

Archiv für Sexualforschung I, 240, 1916.

been installed. This condition lasted eight years. When in addition to the lead screen the tube was also screened, motile spermatozoa slowly reappeared and continued, although the work with the rays was continued, with great precautions however. The potentia coeundi was in no wise affected. This physician has been married five years and while his wife is perfectly healthy the marriage has remained childless in spite of the presence of motile spermatozoa —(H. E. Schmidt).

Regaud and Dubreuil's studies are very interesting. They found that with rabbits, radiation which induced sterility caused an increase in the libido and potentia coeundi. This stimulation is probably connected with the proliferation of the supporting tissue cells above referred to. The same authors showed that spermatozoa which had been slightly radiated but were motile and apparently healthy had lost their power of fertilizing the ovum.

The ovaries are quite as sensitive as the testes, though their location renders them less easily subject to injury. This was first shown by Halberstädter in 1905. With rabbits the Graafian follicles disappeared first. Stronger radiation destroyed the primitive follicles and eggs. Similar changes in the human ovary were found by Vera Rosen, Faber, Fraenke, and Reifferscheidt. Hemorrhage in the ovary was the rule and regeneration of an injured ovary has not been observed. It could occur only where the radiation had not passed the point of injuring the more mature follicles. The experiments on animals are in complete accord with the clinical observations on men.

It is of course, well known that roentgenologists remain childless. I know one man who was blessed with one child a year up to the time when he began making X-ray tubes, since when there has been no further trouble.

Sterility in women is induced the more easily the nearer they are to the menopause. In one case I noted a renewal of the flow one year after radiation. In another case two years elapsed before the flow returned. These are exceptional cases, since out of a hundred cases but these two showed a renewal. It is, however, obvious that a complete destruction of the ovarian function is not easily produced.

There is great need of data in this matter but they seem difficult to obtain. We wish to know whether those who work with X-rays remain sterile even where motile spermatozoa are present in the semen or menstruation continues. It is quite possible that these radiated spermatozoa have lost their power of fertilization. My efforts to obtain this information by a questionnaire have thus far yielded but very discouraging results.

EDITORIALS

ARE WE A MONOGAMIC NATION?

Prof. Maurice A. Bigelow (*Social Hygiene*, April 1916) says we are. He is sure of it and according to him our "sex education is based on the fundamental proposition that sexual morality demands that physiological union be restricted to monogamic marriage, and conversely, that sexual relation outside of marriage is immoral. Such a definition of sexual morality is accepted by church and state and the chief citizens in every civilized country. It is the only practical definition which is satisfactory to the vast majority of educated American men and women, even by those who believe in freedom of divorce and in forgiveness for youthful transgressions of the accepted moral code. Sexual morality has had changeable standards and in other times and countries custom has made polygamy and promiscuity accepted as moral; but the monogamic ideal of morality now prevails in the world's best life."

Why will sane people make such utterly ridiculous statements? Or is it possible that Mr. Bigelow really knows so little of life, that he believes in the correctness of his statements? His *definition* of sexual morality may be accepted "by church and state and the chief citizens in every civilized country," but is it lived up to? We are theoretically a monogamic nation, but are we so practically? Will you find *ten per cent* of men in any civilized country in the world who can claim to have lived a *strictly monogamic* life? How many men are there who enter the bonds of matrimony without having had any previous sexual experiences? In Europe, they say, one or two per cent would be a liberal figure. In this country, let us say, ten per cent. But most certainly not over ten per cent. And as to married men, it is a well known fact, that the greatest support of the disreputable houses, particularly of the better kind, comes from married men.

The monogamic ideal of morality now prevails in the world's best life." Does it? Has Mr. Bigelow read the recent report of the Baltimore vice commission? And what is true of Baltimore is true of New York, Philadelphia, Chicago, San Francisco, New Orleans, etc. etc., in short, is true, of every city in the Union, large and small. And it is not the "low" classes, the workingmen, or tramps, or degenerates, or criminals, that have been shown to be guilty of a loose sexual life; it is just in what Mr. Bigelow calls "the world's best life," that the looseness is most evident. It is

the people who constitute the pillars of society, the business men, manufacturers, lawyers, physicians, clergymen etc. etc., that were found guilty of trampling upon the monogamic ideal.

And speaking further of the world's best life, we will assume that the author does not mean by it the people with the most money, but the people who do the world's best and most important work. They are the inventors, writers, novelists, poets, sculptors, painters, singers, dramatists, actors, etc, etc.—are they distinguished for their strictly monogamic way of living? In theory we are monogamous, but in practice we are as polygamous, as any nation ever was—only more so; and it is more deplorable because connected with a secrecy and hypocrisy that are sickening.

In face of the fact that at least ninety per cent of all men lead a more or less polygamous life, to assert that the monogamic ideal *prevails* in the world's best life is the acme of absurdity. It indicates an innocence and ignorance of life as it is, that would well become a boy in the first year of kindergarten. They are entirely out of place in a professor of biology and in a director in a teacher's college.

Facts may be unpleasant, unpalatable, but we are not justified, for that reason, in blinking them or, what is worse, in distorting them.

SEX AND THE INTERNAL SECRETIONS

We no longer say that masculinity depends upon the testes and femininity upon the ovaries. No, a man is a man on account of his testes plus all his other organs of internal secretion; and a woman is a woman because of her ovaries plus her other organs of internal secretion.

It used to be thought that the uterus is the most important feminine organ; then it was seen that the ovary was more important; but now we know that all the internal secretions are important, and are necessary to make up Woman. These changes in opinions are expressed by the changes in the following three aphorisms:

1. *Propter solum uterum mulier est quod est* (Van Helmont). On account of the uterus alone Woman is what she is.

2. *Propter ovarium solum mulier est quod est* (Chéreau). On account of the ovary alone Woman is what she is.

3. *Propter secretiones internas totas mulier est quod est* (Blair Bell). On account of all the internal secretions Woman is what she is.

ABSTRACTS

TRANSPLANTATION OF TESTES AND OVARIES

When the history of Transplantation of Sex Glands comes to be written a prominent and honored place will have to be accorded to Dr. G. Frank Lydston. He has been doing some very excellent original work in this direction. In an article in the *Journal of the American Medical Association* (May 13, 1916) he reports some additional cases and of those cases we will abstract the most important and the most interesting one.

A man aged 29, sustained an injury to his testes while playing football, twelve years before he consulted the author in July, 1915. His right testicle was enormously swollen (probably hematocele) and very painful. When the swelling subsided, the gland had entirely disappeared. The remaining testicle atrophied to a moderate degree. Virility was unimpaired, and the patient married three years later. No children were born of the union. In May 1915 the patient, without preceding trauma or known infection, suddenly developed pain in the left ileo-lumbar region, left spermatic cord, and the remaining testicle. The testicle did not swell, but, the patient stated, the veins above it were swollen. At the end of three weeks the testicle had completely atrophied.

On examination, the author found a healthy-looking subject, over-fat, with moderately feminine secondary sex characteristics. The beard was almost negligible; the mammae moderately large, and the pelvis distinctly broader than the normal masculine type. The patient stated that his physique had shown these peculiarities increasingly since his injury, twelve years before, but that his sexual power had been "satisfactory" until after the loss of the second testicle. During all these years he had not been physically as fit as before, and for about a year he had with difficulty met the physical and mental exigencies of his business, this lack of efficiency having rapidly increased since the loss of the remaining testicle. Since the loss of the second testicle there had been complete impotence. Examination showed scarcely a vestige of tissue at the end of the spermatic cords—nothing, indeed, that could be accepted as

even a remnant of gland tissue. The penis was of only moderate development, with a long prepuce, but otherwise normal.

On Aug. 1, 1915, Dr. Lydston implanted on this patient both testes taken from a boy of 14, dead of a crushing injury. The subject was just approaching puberty, and not well developed. The testes were removed six hours after death, and kept on ice in sterile salt solution until the operation, thirty-nine hours after the boy's death. The implantation was made in the scrotol sac on each side, at the normal site of the testes. The glands were implanted entire, the epididymes not being removed. Healing was prompt; there was only 1 degree of transient febrile reaction, and very slight inflammatory swelling about the implanted glands. Five days after the implantation the author performed a circumcision. The patient returned home in two weeks. Vigorous and painful erections occurred after the eighth day, and required an ice bag. Successful coitus was practiced three weeks after dismissal from the hospital. At present, seven months after operation, the patient reports that he is perfectly normal, is taking active gymnastic exercise, and has lost nearly 20 pounds of his flabby fat. Erections are vigorous and more frequent than in the average normal subject of similar age. The patient lays special stress on his mental and physical fitness for business. The implanted testes have atrophied only moderately, and are of relatively fair size and fairly normal consistency. The epididymes are plainly distinguishable. As Dr. William T. Belfield, who examined the case and questioned the patient remarked, "The testes, while small, are as well developed and apparently as normal as in many perfectly virile men who come under our observation."

For a while after the implantation, the patient experienced normal orgasms without emission. He stated to Dr. Belfield and Dr. Lydston that after a few weeks he began to have emissions of a considerable amount of fluid, and that these emissions were almost constant. The emitted fluid, while it has not been examined, of course is not testicular secretion—no anastomosis having been done —but comes from the urethra, Cowper's glands, the prostate, and the seminal vesicles. In brief, it probably is composed of all the usual normal elements of the normal semen, save the testicular secretion, of which the spermatozoa are the important element.

For some weeks after the implantation the patient complained of "frightful nervousness." As he described them, his symptoms

were not unlike those produced by strychnine and similar spinal excitants. The "nervous" symptoms finally disappeared. The author attributed the symptoms—and I think rightly—to the unwonted dose of hormone supplied by the implanted testes, to which the nervous system gradually became accustomed.

The subject of sex glands transplantation is an intensely interesting one, and while still in its infancy, further research promises to yield results of the highest importance from therapeutic, physiologic, and psychic standpoints.

SELF AMPUTATION OF MALE SEXUAL ORGANS

Dr. Alexander Peacock, of Seattle, Wash., reports the following interesting case (*Ur. and Cut. Review*):

Henry M., was admitted to the Seattle City Hospital on March 23, 1915. He gave his age as 57 years, his occupation as a logger and his social condition as single. Height 5 feet 9 inches, weight 120 pounds. Nothing interesting was gleaned from his family history. His medical history embraced only small pox.

For the past three months, he had been drinking excessively. He was addicted to masturbation, which habit he could not control. He was also greatly troubled with a urethral stricture of the penile portion. Therefore thinking to cure his various ailments, he grasped his razor and cut off both the testicles and his penis close to the body; then, thinking he has mortally wounded himself and hoping to hasten his end, he drew his razor several times across the left wrist. He failed to die of hemorrhage, for thirty hours later he was found and removed to the hospital.

His condition was one of shock. There were two transverse cuts across the left forearm, in the lower third, with cut tendons dangling from the wound. The pubes showed the penis, scrotum and testicles missing, there was just a raw surface.

He was given 800 c.c. of salt solution intravenously, the bleeding points of the wrist were tied, the tendons sutured, gutta percha drains inserted and wet dressing applied. The genital operation required no flaps or trimming, the cut urethra was stitched to the skin and the two edges of the skin wound were drawn together in the median line with interrupted silk-worm gut. Being in poor condition when returned to his bed, he was given a hypodermoclysis. Except for sloughing of the tendons of the wrist, he made an uneventful recovery.

Outside of being somewhat uncommunicative, his mentality is apparently normal. At present he seems cheerful and contented, and in talking of his act said, "well it cured my stricture and I am through with it anyway."

THE SINGLE STANDARD

Judge Dooling of San Francisco, in a case which recently came before the Federal Court involving the deportation of a young woman of immoral character, said (*Social Hygiene*, April): —In passing upon this phase of the case it may be well to note at the outset that as to the lapses from virtue, not amounting to prostitution, the petitioner stands in exactly the same position before the court as would a man who was similarly charged. If an unmarried man guilty of like offenses against moral law could not be excluded because of such offenses then this woman cannot be excluded because of them. If an unmarried man could not be held under the circumstances to have committed "a misdemeanor involving moral turpitude," then neither can this woman be held to have committed such misdemeanors. For the law makes no distinction here between the man and the woman, but applies to both equally, though such sexual lapses are ordinarily condoned on the part of the former and condemned on the part of the latter. Petitioner may not be excluded on this ground unless her paramour, if an alien, could be excluded under the same circumstances.—Good for the Judge. Some judges do have some common sense.

Coincidently with the training of the needed inhibitory mechanism based on timely knowledge and the habit of self-control, there must be a reasonable certainty in the life of the average man and woman that self-restraint will be rewarded in due time by normal sexual function. *No such assurance exists today.* In its place large masses of men and women equipped with a clean basic instinct are thrown back, in the face of moral prohibitions, upon a prospect in which honorable sexual gratification in decent marriage is made an unattainable luxury within the individual's reproductive prime. The offering of so unsocial and unbiological a moral ideal as a virtual alternative to destructive diseases simply invites the quick degeneration of the race.—John A. Stokes, M. D., in *Social Hygiene.*

Book Notices

The Sex Complex. A study of the relationships of the internal secretions to the female characteristics and functions in health and disease. By W. Blair Bell B. S., M. D., Lond. Professor Royal College of Surgeons, England, etc. William Wood and Company, New York, 1916. $4.00.

We state unequivocally that this is the most important book on the subject indicated in the subtitle. The author was the first to attempt to demonstrate that our reproductive functions are directed and controlled not by the genital glands alone but all the organs of internal secretion acting in unison, and his book abounds, on every page, in facts which are as important as they are fascinating. No student of scientific sexology can afford to miss this solid important addition to our literature.

Sexual Impotence. By V. G. Vecki, M. D. Fifth Edition, W. B. Saunders Co., $2.25.

Dr. Vecki was a pioneer in the scientific treatment of impotence in men; he is also one of the few brave physicians who is not afraid to declare that the non-use of the sexual organs is almost as bad as their abuse; and he was among the first to advocate the use of venereal prophylactics. The reader may therefore be sure to find in his book on sexual impotence (the 5th edition is now before us) a valuable and unbiased presentation of the subject.

The Endocrine Organs. An Introduction to the Study of Internal Secretion. By Sir Edward A. Schäfer, LL. D., D. Sc., M. D., F. R. S. Professor of Physiology in Edinburgh University. With numerous illustrations. Longmans, Green, and Co., New York. 1916. pp. 156. $3.50 net.

Nobody now questions the tremendous importance of the endocrine organs to the body and the psyche of the individual. We know now that man is man not on account of his testes only, but on account of his testes plus his internal secretions. And woman is woman not on account of her ovaries, but on account of her ovaries plus all the internal secretions.

Prof. Schäfer is a pioneer in the study of the ductless glands and their secretions, and nobody who wishes first hand knowledge, avoiding the fanciful and the hypothetical, can neglect Prof. Schäfer's work. All the internal glands are considered: the thyroid and the parathyroids, the thymus, the suprarenals, the pituitary, the pineal gland; but to our readers the last three chapters dealing with the internal secretions of the generative organs in the male and in the female will be of particular interest.

Psychology of the Unconscious. A Study of the Transformations and Symbolisms of the Libido. By. C. G. Jung. Authorized translation, with introduction by Beatrice M. Hinkle, M. D. Moffat, Yard and Company, New York. pp. 566. 1916. $4.00 net.

This is a translation of Jung's well-known *Wandlungen und Symbole der Libido,* which title is here given as a sub-title. Some people would object to the title, "The Psychology of the Unconscious," as it gives a wrong idea of the contents. To review the book adequately would mean to write an analysis of the entire philosophy of Freud and Jung. This cannot be the object of a book notice. The publishers tell us that: "This remarkable book does for psychology what the theory of evolution did for biology; and promises an equally profound change in the thought of mankind. It shows how man, through deeper self consciousness, is destined to become in truth the shaper and creator of his own destiny. It is one of the most important books of the century." Such statements will only be swallowed whole by the quasi-scientific, and the semi-cultured radical layman; in the judicious they will excite a smile. In our opinion the book contains some valuable crystals of truth buried in a muddy morass of medieval mysticism and modern metaphysics. Some of the reasoning in Dr. Jung's book would do credit to the ancient cabalists.

The book has been well translated by Dr. Beatrice M. Hinkle and Miss Helen I. Brayton, and we consider Dr. Hinkle's forty page introduction the most valuable part of the book. For its conciseness and clearness it is altogether admirable.

Twelve Lecturers on the Modern Treatment of Gonorrhea in the Male. By Dr. P. Asch (Strassburg). Translated and annotated by Faxton E. Gardner, M. D. Lecturer and Assistant Visiting Genito-Urinary Surgeon, New York Polyclinic. Illustrated. Rebman Company, New York, pp. 104. $1.00 net.

We reviewed this book when it appeared in the original German. This is a very good translation and it will be read by the general practitioner with profit and interest.

The Next Generation. By Frederick A. Rhodes, M. D., Boston. Richard D. Badger. $1.50.

Another volume in the flood of books intended to solve social and sexual problems. It does not contain an original thought or suggestion, and it has not the slightest raison d'être.